

Science Introduction to waves Sept 4th

A wave is a movement or disturbance which travels through a medium, carrying energy, but does not push things along.

A medium is the substance the wave is travelling through. (water, air-sound, people...)

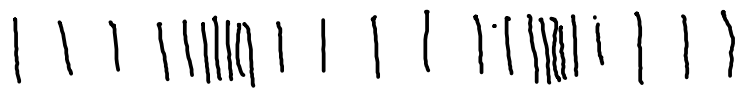
Two types of waves are:

1) Transverse waves (water)



disturbance \updownarrow wave \rightarrow

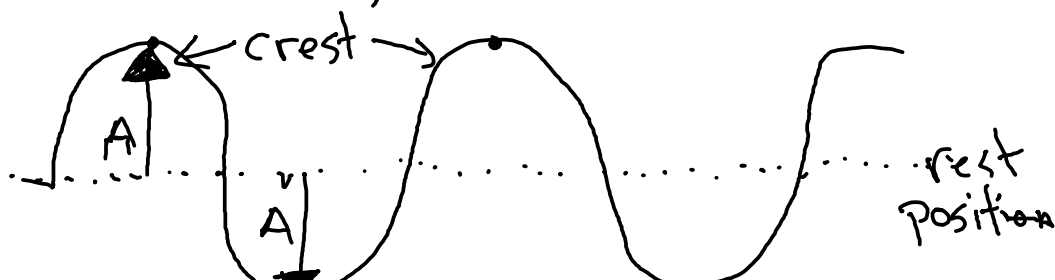
2) (Compression or Longitudinal (sound))

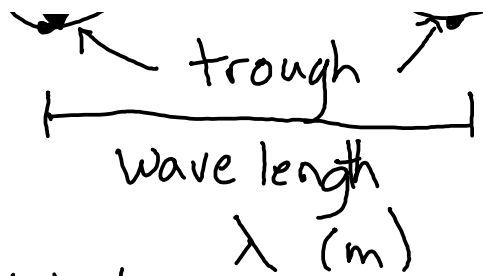


disturbance \leftrightarrow wave \rightarrow

Properties of waves

— wavelength — $\lambda = \text{lambd}$





A = amplitude
 from rest position to crest
 or "trough"
 but NOT!!! From crest to trough



More amplitude = more energy

Frequency

Frequency is measured in Hz.
 where $1 \text{ Hz} = \frac{1 \text{ wave}}{1 \text{ sec}}$

$$f = \frac{\text{\# of cycles}}{\text{time}}$$

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